

Chapter 88-3 - WIND ENERGY CONVERSION SYSTEMS

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88-3.202 - Short title.

This chapter shall be known and may be cited as the wind energy conversion system (or WECS) ordinance of Contra Costa County.

(Ord. 85-39 § 4).

88-3.204 - Purpose.

This chapter is adopted pursuant to the planning and zoning law to promote the effective and efficient use of wind energy conversion systems (WECS), regulate the placement of, and promote safeguards for, WECS so that the public health, safety, and welfare of the citizens of Contra Costa County will be insured.

(Ord. 85-39 § 4).

88-3.206 - Definitions.

As used in this code, unless the context otherwise requires, the following words and phrases shall have the meanings given in this section:

(1)

- "Commercial WECS" means two or more WECS on one parcel or adjoining parcels under common ownership.
- (2) "Height" means the height of the tower and the highest vertical extension of the WECS.
- (3) "Residential WECS" means one WECS on a parcel of land when used only as an accessory to an allowable residential or agricultural use.
- (4) "Wind energy conversion system" and "WECS" mean a machine, such as a wind turbine or windmill, which converts the kinetic energy in the wind into a usable form of mechanical or electrical energy. These terms include all parts of the system and the tower upon which the system is installed, but do not include power transmission equipment.

(Ord. 85-39 § 4, prior code §82-4.281).

Article 88-3.4. Permits

88-3.402 - Permit—Required.

No person shall establish, maintain, or expand a WECS without first obtaining a land use permit as specified in this chapter, Title 8 and Chapter 26-2.

(Ord. 85-39 § 4).

88-3.404 - Permit—Residential WECS exempted.

A residential WECS is exempt from the provisions of this chapter, except for rotor safety, tower access, electromagnetic interference, noise, and aesthetic standards. A residential WECS may operate only between the hours of eight a.m. and six p.m.

(Ord. 85-39 § 4).

88-3.406 - Permit—Authorized only in agricultural districts.

An application may be submitted and a land use permit may be granted for the establishment, maintenance, or expansion of a WECS only in agricultural land use districts established by Division 84 (A-).

(Ord. 85-39 § 4).

88-3.408 - Permit—Application.

- (a) Any person desiring to obtain issuance of a permit required by this chapter shall file a written application with the community development department, which shall administer this chapter.
- (b) The owner of a business, the general partner of a partnership, or the president and secretary of a corporation applying for such a permit and all owners of the land upon which the WECS is or will be located shall sign and verify the application.

(Ord. 85-39 § 4).

88-3.410 - Permit—Application compliance.

The application shall comply with the provisions of Article 26-2.20 and Chapter 82-6.

(Ord. 85-39 § 4).

88-3.412 - Permit—Information requirements.

The application shall be accompanied by the following:

- (a) A site plan including the following information:
- (1)

- Existing topography, trees, and drainage channels,
- (2) Direction of prevailing winds across the project site,
- (3) Location, height, and dimensions of all existing and proposed structures and fencing,
- (4) Location and height above ground of all proposed WECS and aboveground utility lines,
- (5) Location, grades, and dimensions of all temporary and permanent on-site roads,
- (6) Preliminary grading for all roadways, structures, WECS sites, and other site work,
- (7) Distance to all residences, public and private airports and airstrips, schools and any other uses, as determined by the community development director within one mile of all exterior project boundaries;
- (b) A scale profile drawing of the subject site and proposed WECS as seen from the nearest public road and the nearest scenic route;
- (c) A projection of the annual production (kwh) of the total WECS project at full buildout;
- (d) A regrading and revegetation program for temporary roadways no longer needed after project construction;
- (e) A preliminary erosion, drainage, and sediment collection and control plan;
- (f) A reclamation plan consistent with Article 88-3.8;
- (g) The proposed construction access route from the nearest highway;
- (h) A statement by a professional engineer registered in California certifying that the rotor and overspeed controls have been designed and fabricated for the proposed use in accordance with good engineering practice.

(Ord. 85-39 § 4).

88-3.414 - Permit—Cash deposit required.

- (a) In granting any permit required by this chapter, the zoning administrator shall condition the permit on the permittee making a cash deposit of three thousand dollars. Said deposit shall be used in the investigation and evaluation of any apparently valid complaint of excess noise or a permit violation.
- (b) Upon such use of the deposit, the permittee shall restore the balance of the deposit to three thousand dollars.
- (c) In the course of reviewing the permit on the fifth anniversary of its issuance, as provided by Section 88-3.420, the zoning administrator may delete this condition and refund the deposit, without interest, to the permittee or its successor in interest, if, in the zoning administrator's discretion, the record warrants such action.
- (d) If the zoning administrator refunds said deposit, permittee shall promptly reimburse the county for any cost subsequently incurred by it for any investigation or evaluation of similar complaints.

(Ord. 85-39 § 4).

88-3.416 - Permit—Roadway fund required—Repairs.

- (a) Where a WECS can be reached only by a county maintained road, in granting a permit required by this chapter the zoning administrator may condition the permit upon the furnishing of a cash deposit to cover the estimated cost of repair of roadway damage resulting from work performed pursuant to the permit.
- (b) The director of public works shall determine the amount of the deposit, based on such estimated cost.
- (c) The director of public works shall compare pre- and post-work inspections of road conditions and shall determine the needed repairs. The permittee shall be responsible for all costs incurred by the county in performing such repairs.

(d)

Upon determination of the actual repair cost, including engineering costs, the county shall refund to the permittee any unused portion of the deposit, or the permittee shall pay the difference between the actual cost and its deposit, as the case may be.

(Ord. 85-39 § 4).

88-3.418 - Permit—Approval—Findings.

The zoning administrator, or the division of the planning agency hearing the matter on appeal, shall find the following before granting the permit:

(a)

Findings required by Section 26-2.2008 of this code;

(b)

That the WECS use will not adversely affect the orderly conduct of existing or planned land uses in the vicinity;

(c)

That the reclamation plan and associated guarantees and performance security are sufficient to enable the WECS and subject property to meet the intent and purpose of this chapter and be utilized for the intended long-term use shown in the applicable general plan.

(Ord. 85-39 § 4).

88-3.420 - Permit—Review.

(a)

On or before the fifth anniversary of the issuance of the permit, or earlier if the permit so provides, the zoning administrator may review the operation of the WECS.

(b)

The purpose of the review shall be to inquire into the permittee's good faith compliance with the terms and conditions of the permit and the provisions of this chapter, and for any other purpose which may be specified in the permit.

(c)

Prior to each such review, the community development department shall file a report with the zoning administrator regarding the operation of the WECS since the last review and any other matters which the department wishes to bring to the zoning administrator's attention.

(Ord. 85-39 § 4).

88-3.422 - Permit—Revocation.

A permit may be revoked or modified by the zoning administrator pursuant to the provisions of Article 26-2.20.

(Ord. 85-39 § 4).

Article 88-3.6. Standards

88-3.602 - Setback requirements.

(a)

Setbacks from adjacent parcels. A minimum WECS setback of three times overall machine height (measured from grade to the top of the structure, including the uppermost extension of any blades) or five hundred feet, whichever is greater, shall be maintained from exterior project boundaries.

(b)

Setbacks from off-site residence(s) on adjacent parcels. In all cases, regardless of parcel areas, a minimum WECS setback of one thousand feet, from any existing legal off-site residence(s) or general plan designated residential areas, shall be maintained.

(Ord. 85-39 § 4).

88-3.604 - Tower access.

Towers must either (a) Have tower-climbing apparatus located no closer than twelve feet from the ground;

- (b) Have a locked anti-climb device installed on the tower;
- (c) Be completely enclosed by a locked, protective fence at least six feet high; or
- (d) Have a tower-access limitation program approved by the zoning administrator.

(Ord. 85-39 § 4).

88-3.606 - Rotor safety.

Each WECS must be equipped with both manual and automatic controls to limit the rotational speed of the blade within the design limits of the rotor.

(Ord. 85-39 § 4).

88-3.608 - Electromagnetic interference.

The WECS shall be designed, installed and operated so that no disrupting electromagnetic interference is caused. If it has been demonstrated to the zoning administrator that a WECS is causing disruptive interference, the operator shall promptly mitigate the disruptive interference, which may include discontinued operation of one or more WECS.

(Ord. 85-39 § 4).

88-3.610 - Utility notification.

No wind turbine shall be installed until evidence has been given that all affected utility companies have been notified and have indicated that the proposed interconnection is acceptable.

(Ord. 85-39 § 4).

88-3.612 - Noise.

No WECS shall create noise which exceeds a maximum of sixty-five dBA as measured at the lot line. Measurement of sound levels shall not be adjusted for, or average with, nonoperating periods. In the event noise exceeds this standard, the WECS operator shall take all measures necessary to meet this standard, which may include discontinued operation of one or more WECS. A site-specific noise study may be required to confirm compliance with the sixty-five dBA noise standard. Variances from this standard may be granted along property boundaries adjacent to existing or approved WECS where existing residences or general plan designated residential areas will not be adversely affected.

(Ord. 85-39 § 4).

88-3.614 - Site access.

Construction of on-site roadways shall be minimized. Temporary access roads utilized for initial installation shall be regraded and revegetated to a natural condition after completion of installation.

(Ord. 85-39 § 4).

88-3.616 - Parking.

The applicant shall provide a minimum of one on-site parking space for each employee, plus one on-site parking space for each vehicle kept in connection with the use. A minimum of four spaces shall be provided.

(Ord. 85-39 § 4).

88-3.618 - Site aesthetics.

- (a) WECS (towers and blades) structures and fencing shall be of a nonreflective, unobtrusive color.
- (b) All WECS, buildings, and structures shall be sited to minimize visual impact to residences within one mile, adjacent roadways, and County scenic routes. This may require relocation of one or more proposed WECS.
(Ord. 85-39 § 4).

88-3.620 - Signs.

- (a) Signs warning of high voltage electricity shall be posted on stationary portions of the WECS or its tower and at gated entry points to the project site at a height of five feet above the ground.
- (b) No advertising sign or logo shall be placed or painted on any WECS or tower. No more than two identification signs relating to the development shall be located on the project site; signs shall not exceed sixteen square feet in surface area or eight feet in height.
- (c) Logos may be displayed on WECS generator housings in an unobtrusive manner.
(Ord. 85-39 § 4).

Article 88-3.8. Site Reclamation

88-3.802 - Reclamation plan required.

No person shall establish or expand any WECS without (1) first submitting and obtaining approval of a reclamation plan under this article, and (2) posting a security deposit or bond to insure compliance with the approved plan, as set forth in Section 88-3.806.

(Ord. 85-39 § 4).

88-3.804 - Reclamation plan requirements.

The reclamation plan shall identify the specific properties it applies to and shall indicate removal of all buildings, structures, WECS, and foundations to three feet below finish grade; road repair costs required by Section 88-3.414; and all regrading and revegetation necessary to return the subject property to the condition existing prior to establishment or expansion of the WECS. Reclamation shall reflect the site-specific character including topography, vegetation, drainage, and any unique environmental features. A materials and labor estimate shall be submitted for the total reclamation costs.

(Ord. 85-39 § 4).

88-3.806 - Guarantees and security.

Responsibility. The reclamation plan shall state that the operator, applicant and permittee guarantee and accept responsibility for all reclamation work for a period of two years after completion of reclamation.

- (b) Performance Security. A cash deposit or surety bond shall be deposited to insure completion of reclamation work consistent with this article. The amount of security shall be determined by the zoning administrator and shall include all material and labor costs, adjusted for inflation to reflect anticipated total costs at the time of reclamation. Up to eighty percent of the cost of reclamation may be secured by assignment to the county of salvage rights for WECS apparatus.

(Ord. 85-39 § 4).